

List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 11 (Cancelled).

12. (Currently Amended) A method for providing protection from unauthorized access to a field device in process automation technology, whereby the field device is connected over a data bus with a remote control unit, the field device comprises at least one function block with defined ~~communications~~ communication interfaces, whereby the set parameters of the function block ~~an~~ and the field device determine the functionality of the field device and allow the execution of complicated control procedures while interacting with other field devices ~~and allow the execution of complicated control procedures while interacting with other field devices~~ connected to the data bus, the method comprising the steps of:

storing in the field device or in the function block a security program;

performing an authorization examination in the case of accessing the parameters of the function block or the field device over the data bus; and

Permitting a change in the parameters of the function block or the field device or a replacement of the function block by the control unit over the data bus only in the case when the authorization is available.

13. (Previously presented) The method as claimed in claim 12, wherein: the security program is part of a function block.

14. (Previously presented) The method as claimed in claim 12, wherein:
the security program is part of firmware stored in the field device.
15. (Previously presented) The method as claimed in claim 12, wherein:
the security program includes a security key, which is stored in the field device
during configuration of the field device.
16. (Previously presented) The method as claimed in claim 12, wherein:
the security key is an at least 128-bit code.
17. (Previously presented) The method as claimed in claim 12, wherein:
the security key is created during installation of the field device.
18. (Previously presented) The method as claimed in claim 12, wherein:
the security key is provided by the field device.
19. (Previously presented) The method as claimed in claim 12, wherein:
the security key is regularly renewed.
20. (Previously presented) The method as claimed in claim 12, wherein:
the security key is renewed hourly.
21. (Previously presented) The method as claimed in claim 12, wherein:
the security key is stored only in the field device.
22. (Previously presented) The method as claimed in claim 12, wherein:
the field devices are sensors, actuators, controllers, PLCs or gateways.